

## ABSTRACT

A wayside lubrication apparatus (10) for applying a lubricant (26) to a second position (36) of a rail (12) in response to the head of a train (14) being proximate a first position (20) of the rail. The distance (D) between the two positions prevents the lubricant from reducing the traction capability of the drive wheels (38) of the locomotives (16). The application of the lubricant is terminated before a number of rear load cars (46) passes the lubricant applicator (28) so that the residual lubricant remaining on the rail after the train has passed is reduced. Operation of the lubricant dispensing apparatus (22) may be bypassed by an operator-controlled bypass device (60) or in response to a signal (56) indicating moisture on the rail. To avoid excessive lubricant on the rail, a timer (42) is used to prevent repeated applications of lubricant within a predetermined time period, and/or a lubricant container (68) is refilled at a controlled rate to proportion the amount of lubricant applied in response to a second consecutive train.

TOP SECRET - SOURCE 2007